

THE PRICE OF WATER.

While we fully recognize the importance of water as an indispensable condition of life, we seldom realize what quantities of it exist in our daily food, or what high prices we have to pay for it in the ordinary course of our purchases in shop or market. Take, for instance, the butcher's bill, which is usually the most serious item of domestic expenditure. It is a trifle disconcerting to be told that when the thrifty housewife expends money upon the best cuts of beef, no less than three-quarters of the sum is paid for water. Yet such is unquestionably the case—vouched for by the highest analytical authorities. Uncooked beef or mutton contains exactly 75 per cent (or three-fourths of its whole bulk) of water.

Other kinds of meat are less fluid in their nature. Lamb, for example, contains only 64 per cent of water. Pork has still less, the amount varying from 50 to 60 per cent. But those who buy smoked bacon really purchase the greatest amount of solid satisfaction for their money, for this meat seldom contains more than 22 per cent of water.

In the fatty parts of food, hydrogen and oxygen do not exist in the chemical proportions necessary for the formation of water. Therefore, it may be laid down as a general rule that the more fat or oily the meat, the less water will it contain. This fact, the diminution of water as fat increases, is well exemplified in the case of poultry. The flesh of pigeons contains 75 per cent of water, that of fowls and ducks 70 per cent, while a fat goose may have as little as 38 per cent of water in its composition.

The flesh of different sorts of fish varies considerably in the quantity of water which it contains, the figures ranging between 40 and 80 per cent. Most of the kinds commonly seen upon the fish dealer's slab approximate to the higher rate. Thus, the flesh of eels contains 75 per cent of water; that of salmon and other red-fleshed varieties, about 77 per cent; while white fish, such as soles and turbot, reach one per cent higher still.

Milk must be regarded as the type of a complete food. Yet milk, fresh from the cow, and before it has paid a visit to the nearest pump or tap, contains between 86 and 88 per cent of water. This fact is exceedingly significant of the importance which Nature attaches to water as a diluent of her food substances. But certain so-called solid foods contain even more water than the same weight of milk. This seems a paradoxical statement, yet it is perfectly true. Examples of the kind are especially common among our kitchen vegetables.

For instance, the turnip contains water to the extent of nearly 90 per cent, while very nearly the same proportion goes to the "make-up" of a cabbage. But it is a still greater surprise to learn that cucumbers, vegetable marrows, and pumpkins are only 5 per cent removed from water itself, chemically speaking. Nineteen-twentieths of this substance is water, suspended, as it were, in a frail network of solid matter. This brings to light the

extraordinary fact that a cucumber—an object with which a fairly effective blow might be dealt—has from 7 to 9 per cent more water in its composition than the milk which we drink out of a glass!

It is quite impossible to determine the amount of water in any substance, and thus arrive at the price which we have to pay for it, without careful analysis. Guessing is valueless, for appearances are more than usually deceptive in this particular branch of chemi-

from 45 to 50. This increase of moisture has brought about important chemical changes, which have converted the dry and uninviting flour into a pleasant and easily digested food.

At the same time, it is occasionally possible, after adding water to food in the cooking process, finally to evaporate it again with excellent results. This we do in the case of biscuits, which seldom contain more than 8 per cent of water when they come from the oven—that is, some four per cent less than the original flour. From these facts we begin to realize that Nature does not really cheat us when she makes us pay a premium on water when we think we are buying food. A large quantity of water is necessary not only to render food palatable, but also to make it at all edible. Speaking broadly, all dry food is indigestible food; and thus water is seen to play a part in our dietary far more important than is at first evident. Chemical change under an absolutely dry condition is impossible; and with equal certainty it may be said that if the stomach is deprived of its due allowance of water necessary for the digestion of any particular food, it fails in its work.

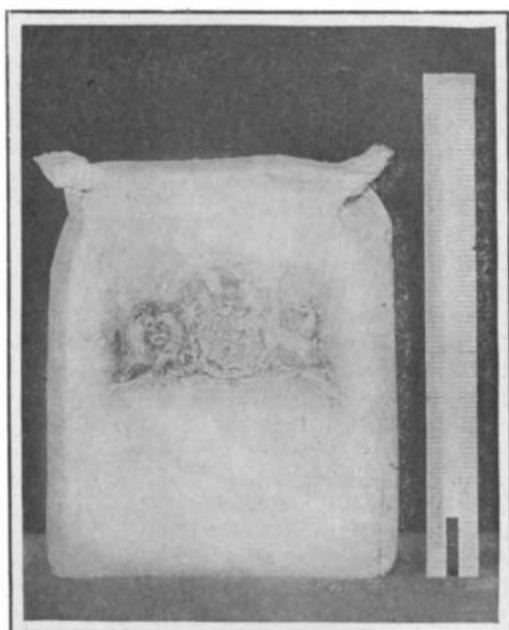
TABLE-TOP PHOTOGRAPHY.

BY PERCY COLLINS.

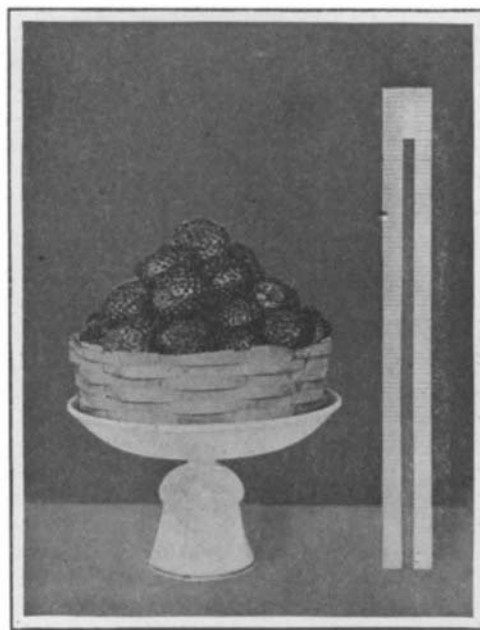
The well-known saying that the "camera never lies" has nowadays become somewhat limited in its possible application—to say the least. In the early days of dry-plate photography, the phrase was no doubt strictly true in its widest sense. But nowadays, as everyone knows, the camera can and does perpetrate on occasion the most flagrant falsehoods. Of course this is true, to an extent, in the case of ordinary photography, when the artist is perfectly straightforward in his intentions, and merely desires to select the best point of view for his picture. In this way it may be said that almost any back yard or piece of waste land will yield a pretty but absolutely untruthful "peep," if only the right spot for setting up the camera be chosen. All around may be grim and ugly, but by dint of a little judicious selection, a little clever "touching," and possibly with the aid of a "cloud negative," the photographer turns out a picture of real beauty.

But in this article it is the writer's intention to deal briefly with a more obvious phase of deceptive photography. Everyone knows something about "faked" photographs, and is aware that the depravity of the camera may often be turned to good account, and made to supply a number of pictures, both curious and beautiful, for the photographer's album. Table-top photography, however, is quite a novel craze, to which few people as yet have paid much attention. Indeed, it is quite on the cards that many of my readers may have heard nothing about it whatever. A few words by way of introduction will therefore be desirable.

Table-top photography may be justly described as an art; for no inconsiderable amount of skill and ingenuity must be called forth if the results are to repay the trouble which must be taken. Briefly, the



Wheaten Flour Contains About 12 Per Cent of Water.



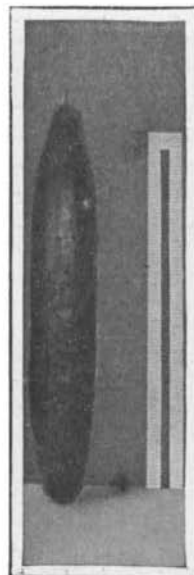
Strawberries Contain 90 Per Cent of Water.

cal study. This fact is well shown in the case of fruit. Whereas the hard, dense-fleshed apple contains from 80 to 82 per cent of water, and the comparatively solid-looking strawberry 90 per cent, the most luscious grapes yield only 80 per cent of water when subjected to the analytical process.

Foods which contain only a small percentage of water are usually unfit for human consumption until they have been cooked. The culinary art, reduced to its simplest terms, consists mainly in innumerable devices for putting water to food in an attractive manner. Bread is a capital case in point. Dry wheaten flour contains, as a rule, about 12 per cent of water; and dry wheaten flour would be voted anything but a satisfactory article of food by the majority. Bread, on the other hand, is the acknowledged staff of life. In this, its changed form, the flour has received an addition of water until the percentage has risen to



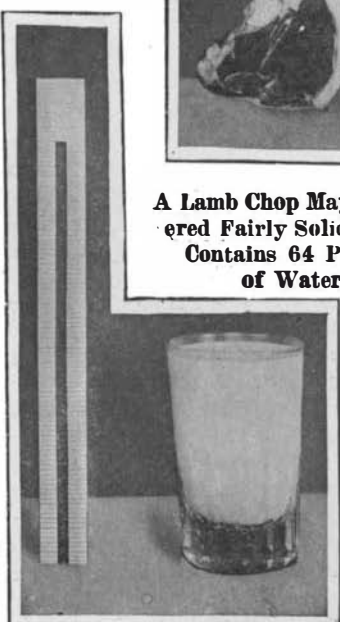
A Lamb Chop May Be Considered Fairly Solid Meat. It Contains 64 Per Cent of Water.



In a Cucumber 5 Per Cent of Solid Matter Contains 95 Per Cent of Water.



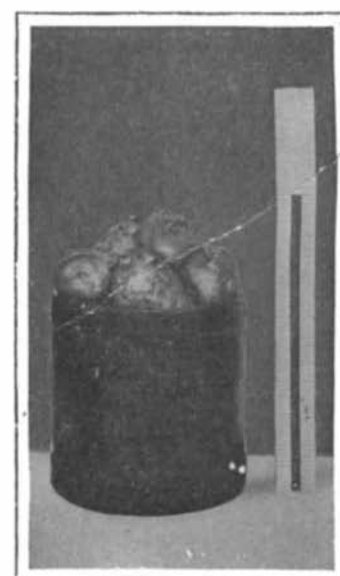
The Solid Apple Contains 80 Per Cent of Water.



Pure Milk Contains 86 Per Cent of Water.



In Converting Flour to Bread the Percentage of Water Is Increased to 45 or 50.



Potatoes Are Among the Vegetables Containing the Least Water.

Various Articles of Food, and the Percentage of Water Contained in Them.

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